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Notes:

1. Untranslatable words are replaced with asterisks (* **).
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CLAIM + DETAILED DESCRIPTION

[Claim(s)]

[Claim 1] (A) A diene system rubber strengthening styrene resin 100 weight part, the (B) colorant 4 - 20 weight parts (However, when using titanium oxide, it restricts to an alumina treatment article) and the light-fast rubber strengthening styrene resin composition characterized by containing (C) hindered amine and (or) the ultraviolet ray absorbent 0.4 - 5 weight parts.

[Claim 2] (A) ethyl methyl ketone (MEK) of diene system rubber strengthening styrene resin -- meltable -- a part -- the resin composition thing according to claim 1 whose reduced viscosity [eta] measured at 30 degrees C using the 0.3g/100ml dimethyl formamide (DMF) solution is 0.45 - 2 dl/g.

[Claim 3] (B) the resin composition thing according to claim 1 whose colorants are an inorganic system pigment and (or) an organic system pigment.

[Detailed Description of the Invention]

[0001]

[Field of the Invention] It is related with the technology of improving the lightfastness of diene system rubber strengthening styrene resin.

[0002]

[Description of the Prior Art] There are HIPS resin, ABS plastics, etc. as shock-proof resin. However, in order that ABS plastics may give shock resistance, the butadiene system polymer is used as a rubber component, but since it has many unstable double bonds chemically in the principal chain, it is easy to deteriorate by ultraviolet radiation etc., and it is known well that it is inferior to lightfastness.

[0003] As a method of improving the lightfastness of ABS plastics, the method of using the

saturation rubber-like polymer which hardly has a double bond is proposed in the principal chain, and what uses acrylic ester system rubber, especially butyl acrylate system rubber for the typical thing is known. Although the AAS resin which carried out graft polymerization of styrene and the acrylonitrile to this butyl acrylate system rubber has the outstanding weatherability, mechanical hardness, and processing moldability, it is inferior to cold shock nature and the color enhancement at the time of shaping.

[0004] Moreover, in order to raise the lightfastness of ABS plastics, addition of an ultraviolet ray absorbent or hindered amine is proposed, but to a severe light-fast demand, discoloration is intense, and it is inadequate.

[0005]

[Problem(s) to be Solved by the Invention] The lightfastness is improved without dropping the mechanical hardness of diene system rubber strengthening styrene resin, processing moldability, cold shock nature, and the color enhancement at the time of shaping not much.

[0006]

[Means for Solving the Problem] [this invention persons / diene system rubber strengthening styrene resin / colorants /, such as an inorganic system pigment and (or) an organic system pigment,] as a result of inquiring wholeheartedly for the purpose of improvement of the lightfastness of diene system rubber strengthening styrene resin without reducing the physical properties of diene system rubber strengthening styrene resin not much by carrying out specific amount addition of hindered amine and (or) the ultraviolet ray absorbent, it found out that lightfastness was improvable and this invention was reached.

[0007] This invention Namely, a (A) diene system rubber strengthening styrene resin 100 weight part, (B) the light-fast rubber strengthening styrene resin composition (Claim 1) characterized by containing a colorant 4 - 20 weight parts (however, it restricting to an alumina treatment article when using titanium oxide), (C) hindered amine and (or) the ultraviolet ray absorbent 0.4 - 5 weight parts -- (A) ethyl methyl ketone (MEK) of diene system rubber strengthening styrene resin -- meltable -- a part -- using a 0.3g/100ml dimethyl formamide (DMF) solution the resin composition thing (Claim 2) according to claim 1 and the (B) colorant whose reduced viscosity [eta] measured at 30 degrees C is 0.45 - 2 dl/g are related with the resin composition thing (Claim 3) according to claim 1 which are an inorganic system pigment and (or) an organic system pigment.

[0008]

[Embodiment of the Invention] [the diene system rubber strengthening styrene resin (A) used for this invention, and (rubber strengthening styrene resin (A) being said hereafter)] Preferably 30 to 95weight % The bottom of 40 to 90weight % of existence of conjugated diene system rubber, and an aromatic vinyl compound, It is the graft copolymer (henceforth a polymer (1)) which polymerizes so that it may become a total of 100 weight % about one or more sorts of

polymerization nature compounds chosen from a vinyl cyanide compound, a maleimide system compound, and unsaturated carboxylic acid ester. In addition, for grants to rubber strengthening styrene resin (A), such as moldability and rigidity The copolymer (henceforth a polymer (2)) which polymerizes the aromatic vinyl compound manufactured separately and one or more sorts of polymerization nature compounds chosen from a vinyl cyanide compound, a maleimide system compound, and unsaturated carboxylic acid ester may be contained. 0 to 90 weight % and further 30 to 85 weight % of a polymer (1) are [the content of the polymer in rubber strengthening styrene resin (1), and a polymer (2) / a polymer (2)] desirable 10 to 100 weight %, and further 15 to 70weight %. If a polymer (1) becomes less than 10weight %, the tendency for shock resistance to fall will arise.

[0009] In the polymerization nature compound (monomer component) which constitutes a polymer (1), it is desirable from a heat-resistant point that they are 15 to 85 weight % and further 20 to 80 weight % comparatively of an aromatic vinyl compound. Moreover, it is desirable that one or more sorts chosen from a vinyl cyanide compound, a maleimide system compound, and unsaturated carboxylic acid ester are 15 to 85 weight % and further 20 to 80 weight %.

[0010] Moreover, in the polymerization nature compound which constitutes a polymer (2), it is desirable from a heat-resistant point that they are 50 to 90 weight % and further 60 to 85 weight % comparatively of an aromatic vinyl compound. Moreover, it is desirable that 10 to 40 weight %, further 15 to 35 weight %, and a maleimide system compound are [0 to 40 weight %, further 0 to 30 weight %, and the unsaturated carboxylic acid ester of a vinyl cyanide compound] 0 to 40 weight % and further 0 to 30 weight %.

[0011] As said conjugated diene system rubber, the unit from diene system monomers, such as butadiene and isoprene, should just be the polymer contained 50 to 100weight %. For example, polybutadiene, Butadiene Styrene (SBR), Butadiene Acrylonitrile (NBR), a butadiene butyl acrylate copolymer, A butadiene methyl acrylate copolymer, a butadiene ethyl acrylate copolymer, a butadiene acrylic acid 2 ethylhexyl copolymer, a butadiene methyl methacrylate copolymer, a butadiene methacrylic acid butyl copolymer, etc. are raised. These may be used independently and may be used combining two or more sorts. Among these, the polybutadiene from a point of cold shock nature, and SBR and NBR are desirable.

[0012] As said aromatic vinyl compound, styrene, alpha-methylstyrene, dimethyl styrene, vinyltoluene, etc. are raised, for example. These may be used independently and may be used combining two or more sorts. Among these, styrene from an industrial standpoint and a heat-resistant point and alpha-methylstyrene are desirable.

[0013] As said vinyl cyanide compound, acrylonitrile, methacrylonitrile, etc. are raised, for example. These may be used independently and may be used combining two or more sorts. Among these, a chemical-resistant point to acrylonitrile is desirable.

[0014] As said maleimide system compound, maleimide, N-methyl maleimide, N-ethylmaleimide, N-propylmaleimide, N-butylmaleimide, N-phenyl maleimide, N-(p-methylphenyl) maleimide, etc. are raised. These may be used independently and may be used combining two or more sorts. Among these, a heat-resistant point to N-phenyl maleimide is desirable.

[0015] As said unsaturated carboxylic acid ester, for example Methyl acrylate, Ethyl acrylate, butyl acrylate, methyl methacrylate, Ethyl methacrylate, butyl methacrylate, hydroxyethyl acrylate, hydroxyethyl methacrylate, hydroxypropyl methacrylate, glycidyl acrylate, glycidyl methacrylate, etc. are raised. These may be used independently and may be used combining two or more sorts. Among these, the methyl methacrylate from a light-fast point and glycidyl methacrylate are desirable.

[0016] Moreover, these other than said polymerization nature compound and a copolymerizable polymerization nature compound, For example, acrylic acid, methacrylic acid, maleic anhydride, vinyl acetate, Copolymerization of vinyl ether, the isobutylene, etc. can be carried out in all the polymerization nature compounds (monomer component) 20 or less weight %. (However, the rates in each in the polymerization nature compound which constitutes the inside of the polymerization nature compound (monomer component) which constitutes a polymer (1), and a polymer (2) need to be 10 or less weight % and 10 weight % or less) .

[0017] [selection of the polymerization nature compound which constitutes a polymer (2)] It is necessary to carry out in consideration of moldability and a heat-resisting property, and a styrene acrylonitrile copolymer, a alpha-methylstyrene acrylonitrile copolymer, a phenyl maleimide styrene acrylonitrile copolymer, and a alpha-methylstyrene styrene acrylonitrile copolymer are desirable.

[0018] ethyl methyl ketone (MEK) of rubber strengthening styrene resin (A) -- meltable -- a part -- using a 0.3g/100ml dimethyl formamide (DMF) solution As for the reduced viscosity [eta] measured at 30 degrees C, it is desirable that they are 0.45 - 2 dl/g from a point of shock resistance and moldability, and further 0.5 - 1 dl/g. When there is a tendency for impact strength to fall if said reduced viscosity becomes less than 0.45 dl/g and 2 dl/g is surpassed, there is a tendency for moldability to fall.

[0019] What is necessary is for there to be no restriction in particular in the manufacture method of rubber strengthening styrene resin (A), and to polymerize conjugated diene system rubber and a polymerization nature compound, and just to manufacture by the method currently generally performed from the former. Moreover, although it changes with manufacture methods, it can obtain as what was mixed combining states, such as latex, slurry, a solution, powder, and a pellet, or these. When collecting polymer from latex of rubber strengthening styrene resin (A) To the usual method, for example, latex, calcium chloride,

magnesium chloride, After solidifying latex by adding the inorganic acid or organic acid like the salt of an alkali metal like the salt of an alkaline earth metal like magnesium sulfate, sodium chloride, and sodium sulfate, hydrochloric acid, sulfuric acid, phosphoric acid, and acetic acid, it can carry out by the method of carrying out dehydration desiccation. Moreover, a spray drying method can also be used.

[0020] receiving a rubber strengthening styrene resin (A) 100 weight part in a colorant (B), in order to make it the light-fast rubber strengthening styrene resin composition of this invention -- 4 - 20 weight part -- it is necessary to blend quite as so much [it is desirable and] as 4 - 15 weight part If said loadings become under 4 weight parts, it will become inadequate improving lightfastness, and if 20 weight parts are surpassed, shock resistance will fall.

[0021] Although it roughly divides into what is used as a colorant (B) and two sorts, an inorganic system pigment and an organic system pigment, are one of it among those -- as an inorganic system pigment -- mainly -- an oxide (titanium oxide and zinc oxide --) Rouge, synthetic iron oxide, titan yellow, chrome oxide, cobalt blue, Hydroxides, such as cobalt green (Synthetic Ochre, alumina white, etc.), Sulfide, chromates (cadmium yellow, cadmium red, vermilion, etc.) (chrome yellow), Sulfate (gypsum fibrosum, barium sulfate, etc.), carbonate (calcium carbonate, white lead, etc.), silicate (ultramarine blue), phosphate (manganese violet, cobalt violet, etc.), arsenate (emerald green), ferrocyanide (Berlin blue), carbon (carbon black), etc. are raised. However, titanium oxide in an oxide is restricted to that by which alumina treatment of the surface treatment method was carried out. Among these, a light-fast improvement effect is large and an oxide and carbon are desirable from coloring nature and a heat-resistant point.

[0022] moreover -- as said organic system pigment -- mainly -- azo pigment (monoazo lake --) Monoazo, diazo ** condensation polyazo, metallic complex azo, phthalocyanine (copper phthalocyanine, porphyrin, TETORAZA porphyrin, Chlorophyll a, hemin, etc.), condensed polycyclic pigment (perylene and peri non, ANSURA quinone, quinoline, Quinacridone, etc.), etc. are raised. Among these, a light-fast improvement effect is large and phthalocyanine and condensed polycyclic pigment are desirable from coloring nature and a heat-resistant point.

[0023] Although said colorant may be used independently and you may use combining two or more sorts, when improving lightfastness, in consideration of the heat-resisting property of the organic system pigment itself, and lightfastness, you have to select use of an organic system pigment especially.

[0024] receiving a rubber strengthening styrene resin (A) 100 weight part in hindered amine and (or) an ultraviolet ray absorbent (C) further, in order to make it the light-fast rubber strengthening styrene resin composition of this invention -- 0.4 - 5 weight part -- it is necessary to carry out 0.4-3 weight part addition preferably If said amount of addition becomes under 0.4 weight part, it will become inadequate improving lightfastness, and if 5 weight parts are

surpassed, shock resistance will fall.

[0025] As said hindered amine, for example Bis(2, 2, 6, and 6-tetramethyl 4-piperidyl) sebacate, Bis(1, 2, 2, 6, and 6-pentamethyl 4-piperidyl) sebacate, 1, 2, 3, 4-tetrakis (2, 2, 6, and 6-tetramethyl 4-piperidyl)oxy carbonyl) butane, 1, 2, 3, 4-tetrakis (1, 2, 2, 6, and 6-pentamethyl 4-piperidyl)oxy carbonyl) butane, Succinate dimethyl 1-(2-hydroxyethyl)-4-hydroxy 2, 2 and 6, 6-tetramethylpiperidine polycondensation thing, A 2-(3, 5-G tert-butyl 4-hydroxybenzyl)-2-n butyl malonic acid screw (1, 2, 2, 6, and 6-pentamethyl 4-piperidyl), 1, 2, 3, and 4-butane tetracarboxylic acid, 1, 2, 2, 6, and 6-pentamethyl 4-PIPERIJINORU, and 3, the polycondensation thing of 9-bis(2-hydroxy 1 and 1-dimethylethyl)-2, 4 and 8, and 10-tetra-oxo-SUPIRO [5, 5] undecane, 1-(3, 5-G tert-butyl 4-hydroxyphenyl)-1 and 1-bis(2, 2, 6, and 6-tetramethyl 4-piperidyl)oxy carbonyl) pentane, 1-[2-(3-(3, 5-G tert-butyl 4-hydroxyphenyl) propionyloxy) ethyl]-4-[3-(3, 5-G tert-butyl 4-hydroxyphenyl) propionyloxy]-2, 2 and 6, 6-tetramethylpiperidine, N and N'-bis(3-aminopropyl) ethylenediamine and 2, a 4-screw [N-butyl N-(1, 2, 2, 6, and 6-pentamethyl 4-piperidyl) amino]-6-chloro 1,3,5-triazine condensate, 4-benzoyloxy 2, 2 and 6, 6-tetramethylpiperidine, Pori -- {[6-(1,1,3,3-tetramethylbutyl) amino 1,3,5-triazine 2 and 4-diy]} and {(2, 2, 6, and 6-tetramethyl 4-piperidyl) imino} hexamethylene {(2, 2, 6, and 6-tetramethyl 4-piperidyl) imino one}} -- It is bis(1-octyloxy 2, 2, and 6, 6-tetramethyl 4-piperidyl) sebacate etc. These may be used independently and may be used combining two or more sorts. Among these, bis(2, 2, 6, and 6-tetramethyl 4-piperidyl) sebacate from a point of lightfastness and cost, 1, 2 and 3, and 4-tetrakis (2, 2, 6, and 6-pentamethyl 4-piperidyl)oxy carbonyl) butane are desirable.

[0026] As said ultraviolet ray absorbent, the thing of a benzotriazol system and a triazine system is desirable. Specifically 2-(5-methyl 2-hydroxyphenyl) benzotriazol, 2-[2-hydroxy 3 and 5-bis(alpha and alpha-dimethylbenzyl) phenyl] 2H-benzotriazol, 2-(3, 5-G tert-butyl 2-hydroxyphenyl) benzotriazol, 2-(3-tert-butyl 5-methyl 2-hydroxyphenyl)-5-chlorobenzo triazole, 2-(3, 5-G tert-butyl 2-hydroxyphenyl)-5-chlorobenzo triazole, 2-(3, 5-G tert-amyl 2-hydroxyphenyl)-5-chlorobenzo triazole, 2-(2'-hydroxy 5'-tert-octyl phenyl) benzotriazol, 2-(4, 6-diphenyl 1,3,5-triazine 2-IRU)-5 -(hexyl)- Oxy-phenol, 2-(4, 6-****- 2, 4-dimethylphenyl 1,3,5-triazine 2-IRU)-5 -(hexyl)- Oxy-phenol etc. is raised. These may be used independently and may be used combining two or more sorts. Among these, the point of lightfastness and cost to 2-[2-hydroxy 3 and 5-bis(alpha and alpha-dimethylbenzyl) phenyl] 2H-benzotriazol is desirable.

[0027] Although said hindered amine and an ultraviolet ray absorbent may be used independently, respectively and may be used together, it is more desirable to use them by a hindered amine independent from the grade of discoloration.

[0028] Additives usually known well, such as a stabilizer, lubricant, an antioxidant, and an antistatic agent, can be used for the light-fast rubber strengthening styrene resin composition

of this invention timely. Lubricant, such as ester of the stabilizer of a phenol system, a sulfur system, and a phosphorus system, ORGANO siloxane, aliphatic hydrocarbon and the higher fatty acid which are used especially for styrene resin, and a higher alcohol, amide, and beef tallow, can be used in order to consider it as a more highly efficient thing as molding resin. These stabilizers and lubricant may be used independently and may be used combining two or more sorts.

[0029] Said hindered amine, an ultraviolet ray absorbent, a stabilizer, etc. can also be added to said resin latex or slurry in the state of dispersion liquid.

[0030] [the light-fast rubber strengthening styrene resin composition of this invention] rubber strengthening styrene resin (A), a colorant (B), hindered amine, and (or) an ultraviolet ray absorbent (C) -- if required, a stabilizer, lubricant, etc. can be blended and it can knead with well-known fusion kneading machines, such as a Banbury mixer, a roll mill, 1 axis extruder, and a biaxial extruder.

[0031] The light-fast rubber strengthening styrene resin composition of this invention can carry out shaping processing by the known processing methods, such as injection molding, extrusion, vacuum forming, and blow molding. Moreover, when the method of a description estimates lightfastness in the work example mentioned later, the value by the color difference meter of degree of discoloration ΔE is excellent in less than 6, less than further 4, and lightfastness, and can use it for the building materials of autoparts and variant extrusion etc.

[0032]

[Example] Next, although the rubber strengthening styrene resin composition of this invention is concretely explained based on a work example, this invention is not limited to these. Hereafter, unless it is shown in particular, a "part" shows a "weight part" and "weight %" is shown "%."

[0033] The cable address of the raw material used by the work example and the comparative example is shown collectively below.

[0034] St:styrene alphaMSt:alpha-methylstyrene AN: -- Acrylonitrile PMI -- :phenyl maleimide MMA:methyl methacrylate tDM:tert-dodecyl mercaptan CHP:cumene hydroxy peroxide colorant 1: -- titanium oxide (TIPAQUE CR-60-2 by Ishihara Sangyo Kaisha, Ltd.)

Colorant 2: Carbon black (Mitsubishi Chemical 30 [#])

Colorant 3: Rouge (TODAKARA 140ED by Toda Kogyo Corp.)

Hindered amine 1: Screw Sebacate hindered amine 2:1, 2 and 3, 4-tetrakis (2, 2, 6, and 6-pentamethyl 4-piperidyl)oxy carbonyl) butane ultraviolet ray absorbent 1:2-[2-hydroxy 3, 5-screw (2, 2, 6, and 6-tetramethyl 4-piperidyl) (alpha and alpha-dimethylbenzyl) Phenyl]2H-benzotriazol [0035] (Synthesis of rubber strengthening styrene resin (A))

(**) The following substance was taught to the reaction container the synthetic agitator of the graft copolymers (polymer (1)) GP1 and GP2, and with a cooler in the nitrogen air current.

0.001 copy of 0.2 copy of 250 copies of water SOJUMU formaldehyde sulfoxylate ferrous sulfate disodium ethylenediaminetetraacetate Copy [0.005] Sodium Dodecylbenzenesulfonate 2.0 Copies Polybutadiene Rubber (with Solid Content) 70 Copies [0036] It is ***** to 60 degrees C under a nitrogen air current, agitating a reaction can. The mixture of the presentation shown in Table 1 was dropped continuously after reaching 60 degrees C in 4 hours. Churning was continued at 60 more degrees C after the end of dropping for 1 hour, the polymerization was terminated, and the graft copolymers GP1 and GP2 were obtained. In addition, the used polybutadiene is a latex-like thing in the mean particle diameter of 0.25 micrometer, and 90% of gel content.

[0037]

[Table 1]

表 1

グラフト共重合体		GP1	GP2
組 成 (部)	St	22.5 部	15.0 部
	AN	7.5 部	
	MMA		15.0 部
	CHP	0.2 部	0.2 部

[0038] (**) The following substance was taught to the reaction container the synthetic agitator of the styrene system copolymers (polymer (2)) FP1-FP3, and with a cooler in the nitrogen air current.

0.003 copy of 0.5 copy of 250 copies of water SOJUMU formaldehyde sulfoxylate ferrous sulfate Disodium ethylenediaminetetraacetate 0.01 copy Sodium dodecylbenzenesulfonate 2.0 copies [0039] It is ***** to 60 degrees C under a nitrogen air current, agitating a reaction can. The mixture of the presentation shown in Table 2 was dropped continuously after reaching 60 degrees C in 6 hours. Churning was continued at 60 more degrees C after the end of dropping for 1 hour, the polymerization was terminated, and the styrene system copolymers FP1-FP3 were obtained.

[0040]

[Table 2]

表 2

スチレン系共重合体		FP1	FP2	FP3
組成(部)	α MSt	60		
	St	15	75	60
	AN	25	25	25
	PMI			15
	tDM	0.5	0.45	0.4
	CHP	0.3	0.3	0.3

[0041] (Ha) (b) of the preparation above of rubber strengthening styrene resin (latex blend) A1-A4, (b) Mix uniformly latex of the obtained graft copolymers GP1 and GP2 and the styrene system copolymers FP1-FP3 by the presentation shown in Table 3. The anti-oxidant of a phenol system was added, with the calcium chloride aqueous solution, coagulation and after carrying out heat condensation, it washed, dehydrated and dried and the powder-like rubber strengthening styrene resin A1-A4 which a graft copolymer (GP), (polymer (1)), and a styrene system copolymer (FP) and (polymer (2)) mixed was obtained.

[0042] in addition, ethyl methyl ketone (MEK) of the obtained rubber strengthening styrene resin A1-A4 -- meltable -- a part -- the reduced viscosity [eta] (dl/g) measured at 30 degrees C is shown in Table 3 using a 0.3g/100ml dimethyl formamide (DMF) solution.

[0043]

[Table 3]

表 3

ゴム強化スチレン系樹脂		A1	A2	A3	A4
組成(部)	GP1	27 部	27 部	27 部	
	GP2				27 部
	FP1	73 部			
	FP2		73 部		73 部
	FP3			73 部	
還元粘度 (dl/g)		0.53	0.60	0.58	0.59

[0044] The rubber strengthening styrene resin A1-A4 manufactured with the one to work-examples 1-9 and comparative example 3 above (Ha), a predetermined colorant, blending predetermined hindered amine and (or) a predetermined ultraviolet ray absorbent by the presentation shown in Tables 4 and 5, and adding antioxidant AO-20 (made by Asahi Denka Kogyo K.K.) 0.5 copy, and PEP-24G (made by Asahi Denka Kogyo K.K.) 0.5 copy further It

blended by the super mixer and the pellet was produced with 40 m/m extruder. The specimen (150mmx150mmx3mm plate) was fabricated with the 150TON injection molding machine from this pellet on conditions with a screw rotation speed [100rpm of], and a nozzle preset temperature of 260 degrees C, and light-fast evaluation was presented.

[0045] Light-fast evaluation was performed on condition of irradiance:162W/m², black panel temperature:89 degree C, and addition irradiance:190 MJ/m² using the strong energy xenon weather meter by Suga Test Instruments Co., Ltd., and degree of discoloration **E was evaluated with the color difference meter. A result is shown in Tables 4 and 5.

[0046]

[Table 4]

表 4

実施例番号		1	2	3	4	比較例 1	比較例 2
組成 (部)	A1	100	100	100	100	100	100
	着色剤 1	6	8	10	6	6	8
	着色剤 2	0.03	0.05	0.07	0.03	0.03	0.01
	ヒンダードアミン 1	0.8	0.8	0.8			
	ヒンダードアミン 2				0.8		1.2
	耐光性 (変色度 ΔE)	5.26	3.55	2.22	2.85	8.57	7.12

[0047]

[Table 5]

表 5

実施例番号		5	6	7	8	9	比較例 3
組成 (部)	A1				100	100	100
	A2	100					
	A3		100				
	A4			100			
	着色剤 1	6	6	6	6	6	
	着色剤 2	0.03	0.03	0.03	0.1	0.1	0.05
	着色剤 3				2	2	3
	ヒンダードアミン 1						0.4
	ヒンダードアミン 2	0.8	0.8	0.8			
	紫外線吸収剤 1				0.8	1.2	
	耐光性 (変色度 ΔE)	3.02	2.89	2.85	3.44	2.56	12.56

[0048]

[Effect of the Invention] to diene system rubber strengthening styrene resin (A), the light-fast rubber strengthening styrene resin composition with which the extensive improvement of the lightfastness was carried out can be obtained by carrying out specified quantity combination of a colorant (B), and hindered amine and (or) an ultraviolet ray absorbent (C).

[Translation done.]